Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Digital Audio Broadcasting Systems	)	MM Docket No. 99-325
And Their Impact On the Terrestrial Radio	)	
Broadcast Service	)	

To: The Media Bureau

COMMENTS OF NATIONAL PUBLIC RADIO, INC.

National Public Radio, Inc. ("NPR") hereby submits its Comments in response to the Public Notice requesting comment on recommendations submitted by the National Association of Broadcasters ("NAB") concerning nighttime operation of AM In-Band/On-Channel ("IBOC") digital radio.[1] As discussed below, NPR supports the recommendations of the NAB.

I. Introduction and Background

NPR is a non-profit membership corporation which produces and distributes noncommercial educational programming, including *All Things Considered®, Morning Edition®, Talk of the Nation®,* and *Performance Today®*, for broadcast by more than 750 public radio stations nationwide. NPR's member licensees, which include a variety of community licensees, school boards and other local institutions, Native American tribes, and private and public colleges and universities, are themselves significant producers of news, informational and cultural programming. NPR also operates the Public Radio

[1] Public Notice, Comment Sought on Use of Digital AM Transmissions During Nighttime Hours, DA 04-1007, MM Docket No. 99-325, rel. April 14, 2004 [hereinafter "Public Notice"].

Satellite Interconnection System and provides representation and other services to its Member stations.

Forty-nine of the public radio stations that broadcast NPR programming are located on the AM band. These stations serve listeners in 20 states and Puerto Rico, including such diverse locations as New York City, Boise, Idaho, and rural Alaska.[2] Accordingly, NPR has a significant interest in improving service to its AM listeners through the development of AM IBOC digital radio.

As a long-standing advocate of the development of terrestrially based digital radio,[3] NPR supported the prompt adoption of the iBiquity Digital Corporation ("iBiquity") AM IBOC digital audio broadcasting (DAB) system for daytime service in

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[2] States with three or more AM stations broadcasting NPR programming are: Alaska (10 AM stations), Oregon (5 AM stations), Colorado (3 AM stations), Iowa (3 AM stations), Massachusetts (3 AM stations), Michigan (3 AM stations), and New York (3 AM stations). The AM band in Alaska is particularly suited to the distribution of NPR programming because of government use of parts of the FM band in Alaska and the ability of AM to propagate over long distances to reach rural residents. See, e.g., 47 C.F.R. § 73.503(b); Amendment of Parts of the Commission's Rules Governing Frequency Allocations and Radio Treaty Matters, 90 F.C.C.2d 507 (1982).

[3] Since 1987, NPR has urged the Commission to consider the spectrum needs of advanced radio systems and generally supported the Commission's efforts to do so. See, e.g., Comments of National Public Radio, Inc., Advanced Television Systems and Their Impact on the Existing Television Broadcast Service, MM Docket No. 87-268, filed Nov. 18, 1987; Comments of National Public Radio, Inc., Amendment of the Commission's Rules with Regard to the Establishment and Regulation of New Digital Audio Radio Services, GEN Docket No. 90-357, filed Nov. 13, 1990; Further Reply Comments of National Public Radio, Inc., In the Matter of Creation of a Low Power Radio Service, MM Docket No. 99-25, filed Nov. 15, 1999; Comments of National Public Radio, Inc., In the Matter of Digital Audio Broadcasting Systems And Their Impact On the Terrestrial Radio Broadcast Service, MM Docket No. 99-325, filed Jan. 24, 2000; Comments of National Public Radio, Inc., In the Matter of Digital Audio Broadcasting Systems And Their Impact On the Terrestrial Radio Broadcast Service, MM Docket No. 99-325, filed February 19, 2002; Reply Comments of National Public Radio, Inc., In the Matter of Digital Audio Broadcasting Systems And Their Impact On the Terrestrial Radio Broadcast Service, MM Docket No. 99-325, filed March 21, 2002.

Comments filed at an earlier stage of this proceeding. At the same time, NPR urged the Commission to encourage the swift development and testing of an acceptable AM IBOC DAB system under nighttime propagation conditions so that the benefits of digital AM IBOC could be enjoyed around the clock.[4]

In late 2002, the Commission authorized AM stations to transmit, on an interim basis, IBOC DAB signals during daytime hours and, if so authorized for their analog broadcasts, during pre-sunrise and post-sunset hours.[5] The Commission reasoned that AM IBOC "has the potential to significantly improve the audio quality of AM broadcasting"[6] and is "significantly more robust than analog AM."[7] The Commission did not authorize nighttime operations in the same Report and Order, given the lack of laboratory and field test data for nighttime operations at the time, and the vastly different AM nighttime propagation characteristics. However, iBiquity has since completed three technical reports on AM IBOC nighttime operations (collectively, the "AM Nighttime Reports"),[8] which have been evaluated by an *ad hoc* technical group of broadcast

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[4] See Comments of National Public Radio, Inc., In the Matter of Digital Audio Broadcasting Systems And Their Impact On the Terrestrial Radio Broadcast Service, MM Docket No. 99-325, filed June 18, 2002; Reply Comments of National Public Radio, Inc., In the Matter of Digital Audio Broadcasting Systems And Their Impact On the Terrestrial Radio Broadcast Service, MM Docket No. 99-325, filed July 18, 2004.

[5] See Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Broadcast Service, Report and Order, 17 FCC Rcd 19990, 20004 (2002).

[6] Id. at 19997.

[7] Id. at 19998.

[8] The AM Nighttime Reports consist of (1) the AM Nighttime Compatibility Study Report, dated May 23, 2003 [hereinafter, the "AM Nighttime Compatibility Study"]; (2) Field Report – AM IBOC Nighttime Performance, dated October 20, 2003; and (3) Field

engineers convened by the NAB (the "NAB Technical Group") and form the basis of the NAB's recommendations.

II. NPR Supports the NAB's Recommendations to Authorize Nighttime AM IBOC DAB Broadcasts By All AM IBOC Stations, Subject to Appropriate Interference Resolution Procedures

Based on the AM Nighttime Reports, NPR supports the recommendations of the NAB to (1) extend the current interim authorization for AM IBOC DAB service to permit nighttime AM IBOC broadcasts by all AM stations currently authorized to operate their analog signals at night, and (2) to extend such authorization without requiring stations to apply for a separate nighttime authorization.[9] As the NAB concluded, nighttime AM IBOC operations promise to offer substantial advantages, including, together with daytime AM IBOC operations, a "richly enhanced listening experience and a revitalization of the AM service."[10] NPR believes that public AM radio stations can best serve their public interest missions and compete in an increasingly digital media world if they enjoy the benefits of enhanced, near-FM, audio quality and improved robustness throughout the day and night.

In most cases, the advantages of nighttime AM IBOC operations should outweigh the disadvantages resulting from isolated instances of interference to existing AM analog signals. As explained in the NAB Report, most interference arising from the introduction of AM nighttime IBOC service would occur at the edge of coverage, outside of the

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Report – AM IBOC Nighttime Compatibility, dated October 31, 2004.

[9] See Report of the National Association of Broadcasters in MM Docket No. 99-325 (filed March 5, 2004) [hereinafter "NAB Report"], at 2.

[10] Id.

station's Nighttime Interference Free contour, and would not impact the station's "core listenership."[11] Moreover, existing levels of analog co-channel interference would exceed, and thus mask, interference from the IBOC signal, especially for Class C stations.[12] According to iBiquity's AM Nighttime Compatibility Study, "the complete conversion to IBOC at night will not noticeably degrade primary groundwave service in a majority of listening areas."[13]

Thus, NPR supports the recommendations in the NAB Report to extend the current interim authorizations for AM IBOC DAB service to permit nighttime AM IBOC broadcasts. NPR believes that a notification process equivalent to that in place for daytime AM IBOC service would be the best and most efficient way to authorize nighttime AM IBOC operations, while also protecting the public interest.[14] Moreover, AM IBOC nighttime and daytime authorizations ultimately should be granted on more than an interim basis.[15]

NPR is concerned, however, about the potential for increased interference to some existing analog AM stations as a result of the authorization of nighttime AM IBOC service. For that reason, NPR supports the NAB's recommendations that the FCC act, on a case-by-case basis, to address increases in interference to analog AM service beyond

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[11] Id. at 3; AM Nighttime Compatibility Study at 2.

[12] See NAB Report at 3; AM Nighttime Compatibility Study at 3.

[13] AM Nighttime Compatibility Study at 2, 28.

[14] See Public Notice, IBOC Notification Procedures Effective Immediately, DA 03-831, rel. March 20, 2003.

[15] See Further Notice of Proposed Rulemaking and Notice of Inquiry, In the Matter of Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Radio Broadcast Service, MM Docket No. 99-325 (released April 20, 2004), at ¶ 44.

those predicted in the AM Nighttime Reports.[16] The procedures for addressing this unanticipated interference, and the interference that will trigger FCC attention, should be spelled out clearly by the Commission so that such instances of interference can be addressed promptly.

III. Conclusion

For the foregoing reasons, NPR supports the NAB's recommendations to extend the current interim authorization for AM IBOC DAB service to permit nighttime AM IBOC broadcasts by all AM stations authorized to operate at night without requiring the stations to apply for separate nighttime IBOC authorizations. NPR further supports the NAB's recommendation that the Commission address, on a case-by-case basis, significant increases in interference to analog AM stations caused by nighttime AM IBOC operations.

[16] See NAB Report at 1, 4.

Respectfully submitted,

NATIONAL PUBLIC RADIO, INC.

Michelle M. Shanahan /s/

Neal A. Jackson
Vice President for Legal Affairs,
General Counsel and Secretary
Michael Starling
Vice President for Engineering
Michael Riksen
Vice President for Government Relations
Dana Davis Rehm
Vice President for Member Services
John Kean
Senior Technologist
Michelle M. Shanahan
Associate General Counsel
Gregory A. Lewis
Associate General Counsel

635 Massachusetts Avenue, N.W.
Washington, DC 20001
(202) 513-2040

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